

**FEATURES:**

- mini USB
- eCon software
- IP65
- Linear chrtcs.
- OLED

**INPUTS:**

- 
- 
- 20..20 mA
- 10..10 V
- ±60 mV

**OUTPUTS:**

- 
- 

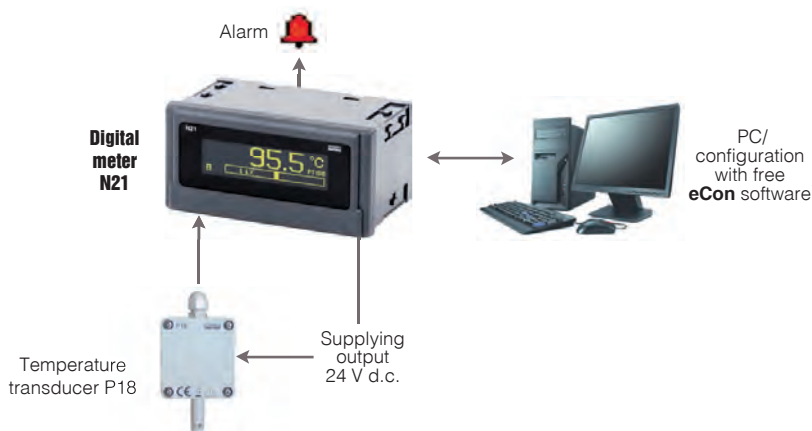
**GALVANIC ISOLATION:**

- 
- Supply
- mini USB
- 
- 



- Universal measuring input (for standard signals and cooperation with temperature sensors).
- Relay alarm output.
- Universal supply voltage from 24 V up to 230 V a.c./d.c.
- Supply of object transducers 24 V d.c.
- OLED display.
- Meter configuration through miniUSB connector with free eCon software.
- Programmable parameters in eCon software:
  - selection of measured value,
  - rescaling of indications (individual characteristic),
  - accuracy of measured value (decimal point),
  - alarm output mode,
  - measurement averaging time,
  - defining your own unit,
  - language selection.

**EXAMPLE OF APPLICATION**



Measurement and signalling of temperature exceedings.

**INPUTS**

Input type	Measuring range	Parameters	Basic error
Voltage input	-72 mV...-60 mV...60 mV...72 mV -12 V...-10 V...10 V...12 V	Input resistance: >200 kΩ Input resistance: >1 MΩ	± (0.1% of range+ 1 digit)
Current input	-24 mA...-20 mA...20 mA...24 mA	Input resistance: <10 Ω ± 1%	
Temperature measurement Pt100	- 200...850°C	current flowing through the sensor < 300 µA	
Temperature measurement through J thermocouple	- 50...1200°C		
Temperature measurement through K thermocouple	- 50...1370°C		

**OUTPUTS**

Output type	Properties
Alarm output	alarm relay output NO, load capacity 250 V~/0.5 A~ number of switches 1x10 <sup>5</sup>
Supply for external transducers	24 V d.c. ± 5%, 30 mA

**EXTERNAL FEATURES**

Readout field	OLED display 128 x 32 pixels in amber color	
Weight	< 0.25 kg	
Overall dimensions	96 × 48 × 64 mm	panel cut-out: 92 <sup>+0.6</sup> × 45 <sup>+0.6</sup> mm
Protection grade (acc. to EN 60529)	from frontal side: IP65	from terminal side: IP20



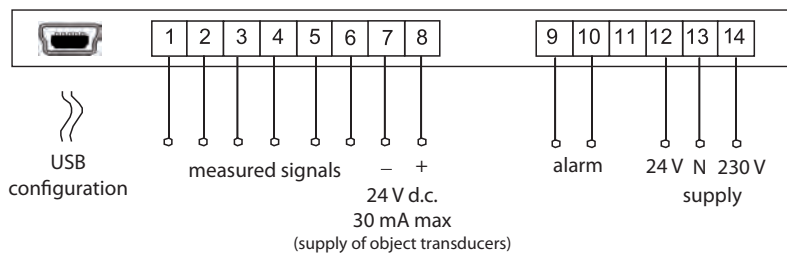
**RATED OPERATING CONDITIONS**

Supply voltage	22..60 V a.c. 50..400 Hz / 20..60 V d.c. (terminals 12-13) 60..253 V a.c. 40..400 Hz / 60..300 V d.c. (terminals 13-14)	power consumption < 3 VA
Operating temperature	ambient: -10...23...55°C	storage: -25...85°C
Relative humidity	< 95%	condensation inadmissible
Operating position	any	

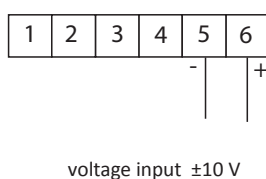
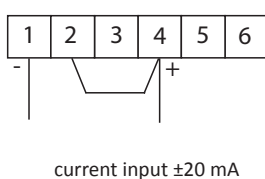
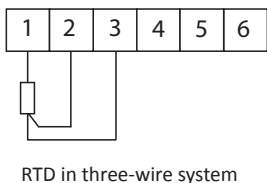
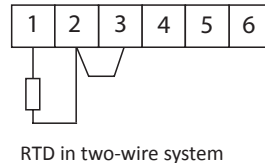
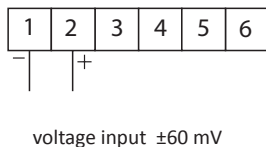
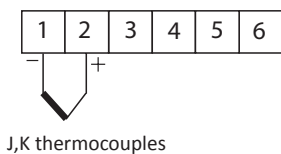
**SAFETY AND COMPATIBILITY REQUIREMENTS**

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Safety requirements		acc. to EN 61010-1
Galvanic isolation	3.2 kV d.c.	

**CONNECTION DIAGRAMS**



**Fig. 1 Electrical connections of N21 meter.**



**Fig. 2. Connection to measuring inputs.**

**ORDERING**

ORDERING CODE			
	N21 -	XX	X X
<b>Versoin:</b>			
standard		00	
custom-made*		XX	
<b>Language:</b>			
Polish			P
English			E
other*			X
<b>Acceptance tests:</b>			
without extra requirements			0
with an extra quality inspection certificate			1
acc. to customer's request*			X

\* - only after agreeing with the manufacturer

**N21 meter has in standard:**

- programmable input,
- relay output,
- supplying output 24 V d.c.,
- supply voltage: 22..60 V a.c. 50..400 Hz / 20..60 V d.c. (terminals 12-13), 60..253 V a.c. 40..400 Hz / 60..300 V d.c. (terminals 13-14),
- miniUSB socket for meter programming.

**ORDER EXMAPLE:**

The code **N21-00E0** means:

- N21** – meter N21,
- 00** - standard version,
- E** - english version,
- 0** - without extra requirements.

SEE ALSO:



Free eCon software for programming LUMEL products. Available on our website.



Current transformers from 5 A up to 6 kA.



3-phase power network meter ND20.

**OUR OFFER**



[www.lumel.com.pl](http://www.lumel.com.pl)

For more information about LUMEL products please visit our website: [www.lumel.com.pl](http://www.lumel.com.pl).